

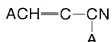
What is claimed is:

1. A coating composition comprising 5 to 30 weight percent of solids, said solids comprising (a) a hydrogenated copolymer of a conjugated diene and an unsaturated nitrile, (b) a phenolic resin, (c) a di- or polyisocyanate, (d) a curing component, and (e) from 70 to 95% of a solvent.

2. A coating composition according to claim 1 wherein the conjugated diene is selected from the group consisting of 1,3-butadiene; 2,3-dimethylbutadiene; 1,3-pentadiene; 1,3-hexadiene; 2,4-hexadiene; 1,3-heptadiene; piperylene; and isoprene.

3. A coating composition according to claim 2 wherein the conjugated diene is 1,3-butadiene.

4. A coating composition according to claim 1 wherein the unsaturated nitrile corresponds to the following formula:



wherein each A is hydrogen or a hydrocarbyl group having from 1 to about 10 carbon atoms.

5. A coating composition according to claim 1 wherein the unsaturated nitrile is acrylonitrile or methacrylonitrile.

6. A coating composition according to claim 1 wherein the hydrogenated copolymer has an unsaturation level between about 0.1 and 20 mole percent.

7. A coating composition according to claim 6 wherein the unsaturation level is between about 3 and 7 mole percent.

8. A coating composition according to claim 1 wherein the phenolic resin is prepared by reacting a phenolic compound with an aldehyde compound under acidic, neutral or basic conditions with an appropriate catalyst.

9. A coating composition according to claim 8 wherein the phenolic compound is selected from the group consisting of phenol, p-t-butylphenol, p-phenylphenol, m-bromophenol, o-chlorophenol, p-chlorophenol, p-alkoxyphenol, o-cresol, m-cresol, p-cresol, 2-ethylphenol, amylphenol, nonylphenol, xlenol, naphthol, carvacrol, cashew nutshell liquid, resorcinol, orcinol, phloroglucinol, pyrocatechol, pyrogallol, salicylic acid, bisphenol A, bisphenol S, and combinations thereof.

10. A coating composition according to claim 9 wherein the phenolic compound is phenol.

11. A coating composition according to claim 8 wherein the aldehyde compound is selected from the group consisting of formaldehyde, acetaldehyde, propionaldehyde, isobutyraldehyde, 2-ethylbutyraldehyde, 2-methylpentaldehyde, 2-ethylhexaldehyde, para-formaldehyde, trioxane, furfural, hexamethylenetetramine, and benzaldehyde.

12. A coating composition according to claim 11 wherein the aldehyde compound is formaldehyde.

13. A coating composition according to claim 1 wherein the curing component comprises elemental sulfur in combination with an organic accelerator.

14. A coating composition according to claim 13 wherein the organic accelerator is a derivative of a dithiocarbamic acid, a xanthogenic acid, or a thiuram sulfide.

15. A coating composition according to claim 13 wherein the organic accelerator is selected from the group consisting of zinc dimethyldithiocarbamate, benzothiazyl disulfide, zinc isopropyl xanthate, N-pentamethylene-ammonium-N'-pentamethylenedithiocarbamate, and combinations thereof.

16. A coating composition according to claim 15 wherein the organic accelerator is a combination of zinc dimethyldithiocarbamate and benzothiazyl disulfide.

17. A coating composition according to claim 1 wherein the solvent is selected from the group consisting of ketones; acetates; toluene, xylene and their derivatives; nitropropane; and ethylene dichloride.

18. A coating composition according to claim 1 wherein the phenolic resin is present in an amount ranging from about 3 to 50 percent by weight of the hydrogenated copolymer and the curing component is present in an amount ranging from about 0.1 to 12 percent by weight of the hydrogenated copolymer.

19. A coating composition according to claim 18 wherein the phenolic resin is present in an amount ranging from about 5 to 15 percent by weight of the hydrogenated copolymer, the curing component is present in an amount ranging from about 1 to 6 percent by weight of the hydrogenated copolymer, and wherein the coating composition has a total solids content ranging from about 13 to 18 percent.

20. The coating composition of claim 1 wherein said di- or polyisocyanates is selected from the group consisting of as 1,6-hexamethylene diisocyanate; 1,8-octamethylene diisocyanate; 1,12-dodecamethylene diisocyanate; 2,2,4-trimethylhexamethylene diisocyanate, and the like; 3,3'-diisocyanatodipropyl ether; 3-isocyanatomethyl-3,5,5'-trimethylcyclodexyl isocyanate; hexamethylene diisocyanate; 4,4'-methylenebis(cyclohexyl isocyanate); cyclopentallene-1,3-diisocyanate; cyclodexylene-1,4,-diisocyanate; methyl 2,6-diisocyanatocaprolate; bis-(2-isocyanatoethyl)-fumarate; 4-methyl-1,3-diisocyanatocyclohexane; trans-vinylene diisocyanate; 4,4'-methylene-bis(cyclohexylisocyanate); methane diisocyanates; bis-(2-isocyanatoethyl) carbonate ; N,N',N"-tris-(6-isocyanatohexamethylene)biuret, toluene diisocyanates; xylene diisocyanates; dianisidine diisocyanate; 4,4'-diphenylmethane diisocyanate; 1-ethoxy-2,4-diisocyanatobenzene; 1-chloro-2,4-diisocyanatobenzene; bis(4-isocyanatophenyl)methane; tris(4-isocyanatophenyl)methane; naphthalene diisocyanate; 4,4'-biphenyl diisocyanate; m-phenylene diisocyanate; p-phenylene diisocyanate; 3,3'-dimethyl-4,4'-biphenyl diisocyanate; p-isocyanatobenzoyl isocyanate; tetrachloro-1,3-phenylene diisocyanate; 2,4-toluene diisocyanate, 2,6-toluene diisocyanate, 4,4'-isocyanate, bis-

[isocyanatopheny] methane polymethylene poly(phenyl isocyanate), isophrone diisocyanate, mixtures thereof .

21. The coating of claim 1 wherein said di- or polyisocyanate is present at from 3 to 30 wt. parts per 100 wt. parts of said hydrogenated copolymer of a conjugated diene and an unsaturated nitrile.
22. The coating of claim 1 wherein said di- or polyisocyanate is present at from 8 to 15 wt. parts per 100 wt. parts of said hydrogenated copolymer of a conjugated diene and an unsaturated nitrile.
23. A method of coating a substrate comprising applying a coating composition to the surface of the substrate wherein the coating composition comprises the coating composition of claim 1.